

## SUPPLEMENTARY DATA

### S3. Data for reproducibility of gel scan analysis.

		1	2	3	4	5	6	Core	whole
<b>HMW-GS</b>	R1	3.70%	22.95%	25.68%	25.49%	26.56%	29.45%	20.60%	21.94%
	R2	2.57%	24.78%	27.01%	29.55%	30.20%	27.94%	22.43%	21.63%
	R3	5.88%	26.46%	26.70%	27.87%	27.33%	28.49%	25.53%	23.52%
	R4	5.44%	23.98%	24.31%	24.63%	24.30%	26.83%	23.29%	22.61%
	Mean	4.40%	24.54%	25.92%	26.88%	27.10%	28.18%	22.96%	22.43%
	Standard deviation	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.01
	<b>Coefficient of variation</b>	<b>35.07</b>	<b>6.04</b>	<b>4.70</b>	<b>8.34</b>	<b>8.99</b>	<b>3.88</b>	<b>8.91</b>	<b>3.74</b>
<b><math>\omega</math>-gliadins</b>	R1	18.91%	20.06%	20.91%	19.86%	19.44%	19.31%	15.81%	18.74%
	R2	19.85%	21.40%	21.01%	22.01%	21.12%	20.02%	17.62%	18.81%
	R3	19.01%	21.94%	21.69%	20.93%	19.30%	18.95%	17.62%	19.17%
	R4	20.64%	21.85%	21.84%	18.98%	19.01%	17.92%	17.05%	18.01%
	Mean	19.60%	21.31%	21.36%	20.44%	19.72%	19.05%	17.02%	18.68%
	Standard deviation	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00
	<b>Coefficient of variation</b>	<b>4.14</b>	<b>4.07</b>	<b>2.20</b>	<b>6.43</b>	<b>4.83</b>	<b>4.60</b>	<b>5.01</b>	<b>2.59</b>
<b>LMW-GS+<math>\alpha</math>,<math>\gamma</math> gliadins</b>	R1	77.39%	56.99%	53.41%	54.66%	54.00%	51.24%	63.59%	59.32%
	R2	77.58%	53.81%	51.98%	48.45%	48.68%	52.04%	59.96%	59.56%
	R3	75.11%	51.60%	51.61%	51.20%	53.37%	52.56%	56.85%	57.31%
	R4	73.91%	54.18%	53.86%	56.39%	56.69%	55.25%	59.66%	59.37%
	Mean	76.00%	54.15%	52.71%	52.67%	53.18%	52.77%	60.01%	58.89%
	Standard deviation	0.02	0.02	0.01	0.04	0.03	0.02	0.03	0.01
	<b>Coefficient of variation</b>	<b>2.35</b>	<b>4.08</b>	<b>2.06</b>	<b>6.74</b>	<b>6.26</b>	<b>3.29</b>	<b>4.60</b>	<b>1.80</b>

Gel proteins bands in each lane were divided into three groups corresponding to HMW-GS,  $\omega$ -gliadins and LMW glutenin subunits+  $\alpha$ ,  $\gamma$  gliadins. All but one of the coefficients of variation (highlighted in red) are lower than 10, indicating that the differences between replicates are not statistically significant.